

SOLDATKIN, M.T., dotsent, kand.tekhn.nauk; SYCHEV, A.T.

Investigating the electric conductivity of bricks in relation  
to their moisture content. Sbor. nauch. trud. Bel. politekh.  
inst. no.74:80-85 '59. (MIRA 13:8)  
(Moisture--Measurement) (Electric conductivity)  
(Bricks--Testing)

MASLOV, N.N.; SYCHEV, A.T. (Mordovskaya ASSR); GELLER, Yu.A., doktor  
tekhn.nauk, prof., DRAZNIN, inzh.; MALINKINA, Ye.I., kand.tekhn.  
nauk

Answering letters from our readers. Metalloved. i term. obr.  
met. no.11:60-63 N '61. (MIRA 14:12)  
(Nickel plating)  
(Steel--Heat treatment)  
(Tool steel)

GUREVICH, L.Ye.; SYCHEV, A.T.

Automation of coke oven heating systems. Koks i khim. no.4:  
22-24 '62. (MIRA 16:8)

1. Kemerovskiy koksokhimicheskiy zavod.  
(Coke ovens) (Automatic control)

PANENKO, F.M.; SYCHEV, A.T.; TIBO-BRIN'OL', Ye.V.

Automation of the charging of pitch-coke ovens. Koks i khim.  
no.6:24-27 '63. (MIRA 16:9)

1. Kemerovskiy koksokhimicheskiy zavod.  
(Coke ovens) (Automation)

SYCHEV, A.T.

Study of a vertical submerged turbulent stream incident on the  
plane of a smooth ceiling. Inzh.-fiz. zhur. 7 no. 3:46-53  
Mr '64. (MIRA 17:5)

1. Belorusskiy politekhnicheskii institut, Minsk.

SYCHEV, A.T.

Air supply by means of a semi-infinite fanned submerged turbulent  
jet. Inzh. fiz. zhur. 7 no.6:81-85 '64. (MIRA 17:12)

1. Belorusskiy politekhnicheskii institut, Minsk.

SYCHEV, A.V.

Some properties of moduli. Sib. mat. zhur. 6 no.5:1108-1119 S-0  
'65. (MIRA 18:10)

SYCHEV, Aleksey Yakovlevich, professor, doktor ekonomicheskikh nauk;  
DUMLER, Sergey Avgustovich, inzhener; SIVKOV, Viktor Mikhaylovich;  
UMANSKAYA, M.M., inzhener, redaktor; GORELIK, I.G., kandidat  
ekonomicheskikh nauk, redaktor; BOGOMOLOV, V.I., inzhener; KAR-  
CHEVSKIY, V.A., inzhener, redaktor; PEKELIS, I.B.; POLYAKOV, S.A.,  
inzhener; SHTEYMBERG, Ye.S.; CHURILOVICH, L.M.; AVRUTSKAYA, R.F.,  
redaktor; EVENSON, I.M., tekhnicheskij redaktor.

[The economics of non-ferrous metallurgy] Ekonomika tsvetnoi me-  
tallurgii. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po cherno i  
tsvetnoi metallurgii, 1954. 291 p. (MLRA 8:2)  
(Nonferrous metals--Metallurgy) (Metal industries)



*Sychev, A. Ya.*  
USSR/Physical Chemistry. Thermodynamics, Thermochemistry, B-8  
Equilibria, Physical-Chemical Analysis, Phase Transitions.

Abs Jour: Ref Zhur-Khimiya, No 5, 1957, 14706

Author : P. K. Migal', A. Ya. Sychev.

Inst : -

Title : Physical-Chemical Study of System Cobalt Chloride -  
Sodium Citrate in Aqueous Medium

Orig Pub: Zh. neorgan. khimii, 1956, 1, No 4, 726-732

Abstract: A Physical-chemical study of the system cobalt chloride (I) - sodium citrate (II) in aqueous medium was carried out. The specific electric conductivity  $\sigma$  of the system I-II was measured at 15, 25 and 50° in the range of concentrations from 0.01 to 1.00 M. The isotherms of  $\sigma$  pass through a sharp minimum at the relation between I : II = 1 : 1, the breaking angle of the isotherm becomes sharper with the temperature rise. The isotherm minimum and the rectilinearity of both their branches is characteristic of concentration from 0.01 to 0.1 M; also a

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"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001654220012-8

*See box A. K.*

APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001654220012-8"

SYCHEV, A. Ya. Cand Chem Sci -- (diss) "Phys-chem study of the complex formation of certain metals with citric and apple acids in <sup>an aqueous</sup> ~~a water~~ solution." Kishinev, 1957. 15 pp 22 cm. (Min of Higher Education USSR. Kishinev<sup>e</sup> State Univ). 100 copies. (KL 23-57, 109).

~~-22~~ 22

SYCHEV, A.Ya., prof., obshchiy red.; DUMLER, S.A., obshchiy red.;  
SVET, Ye.B., red.; VYGLOVA, M.A., tekhn.red.

[Technology and economics; problems of the economic efficiency  
of modern technology] Tekhnika i ekonomika; voprosy ekonomicheskoi  
effektivnosti novoi tekhniki. Cheliabinsk, Cheliabinskoe  
knizhnoe izd-vo, 1958. 238 p. (MIRA 13:2)  
(Technology)

AUTHORS: Sychev, A. Ya. 78-2-9/45  
 Migal', P. K., Sychev, A. Ya.  
 TITLE: Physico-Chemical Investigations Concerning the Complex-  
 Formation of Zinc, Cadmium and Copper With Sodium Citrate  
 in an Aqueous Medium (Fiziko-khimicheskoye issledovaniye  
 kompleksobrazovaniya ionov tsinka, kadmiya, medi s limonno-  
 kislym natriyem v vodnoy srede).  
 PERIODICAL: Zhurnal Neorganicheskoy Khimii, 1958, Vol. 3, Nr 2,  
 pp. 309-313 (USSR).  
 ABSTRACT: The complex-formation in the system  $\text{ZnSO}_4\text{-C}_6\text{H}_5\text{O}_7\text{Na}_3$ ,  $\text{CdCl}_2\text{-}$   
 $\text{C}_6\text{H}_5\text{O}_7\text{Na}_3$  and  $\text{CuSO}_4\text{-C}_6\text{H}_5\text{O}_7\text{NO}_3$  in an aqueous medium was in-  
 vestigated by the methods with electrolytic conductivity and  
 potentiometry /pH/. According to the results with electro-  
 lytic conductivity in diluted solutions (0,01 - 0,1 mol/l)  
 the complexes metal : addendum = 1 : 1 exist. According to the  
 determination by the optical density in the system  $\text{CuSO}_4\text{-}$   
 $\text{C}_6\text{H}_5\text{O}_7\text{Na}_3$  and at pH = 4 the complex copper : citrate = 1 : 1  
 exists. In weakly-acid solutions the complex-formation in the  
 systems zinc-citrate, cadmium-citrate, copper-citrate  
 Card 1/2

Sychev, R. Ya.

78-2-10/43

AUTHORS: Migal', P. K., Sychev, A. Ya.

TITLE: The Stability of the Citric-Acid Complexes of Some Metals  
(Ustoychivost' limonnokislykh kompleksov nekotorykh metallov).

PERIODICAL: Zhurnal Neorganicheskoy Khimii, 1958, Vol. 3, Nr 2,  
pp. 314-324 (USSR)

ABSTRACT: This work investigated the stability constants of the bi-valent metals  $Ni^{2+}$ ,  $Co^{2+}$ ,  $Zn^{2+}$ ,  $Cd^{2+}$ ,  $Cu^{2+}$  with citric acid. The potentiometric method (pH) was employed for determining the stability constant. According to their stability in an acid medium the metals are to be arranged in the following order:  $Cu > Ni > Co > Zn > Cd$ . The influence of the above-mentioned ions upon citric acid in a neutral or alkaline medium is to be expressed by the following equation:  

$$M^{2+} + Cit^{4-} \rightleftharpoons MCit^{2-}$$
 The two- or four-fold excess of citric acid in relation to the metal-ions does not influence the stability constant. The stability constant of the complexes was calculated from the titration curves in the ratio metal-ion : addendum = 1 : 1. The third dissociation constant of citric acid  $K_3 = 3,24 \cdot 10^{-6}$  was used in the calculation of the stability constant. On the basis of the potentiometric

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The Stability of the Citric-Acid Complexes of Some Metals

78-2-10/43

titrations the following stability constants were found:

$[\text{NiCit}]^{1-}$ ,  $[\text{NiCit}_2]^{4-}$  with  $\lg K$  4,99, 2,77  
 $[\text{CoCit}]^{1-}$ ,  $[\text{CoCit}_2]^{4-}$  with  $\lg K$  4,41, 2,34  
 $[\text{ZnCit}]^{1-}$ ,  $[\text{ZnCit}_2]^{4-}$  with  $\lg K$  4,25, 1,91  
 $[\text{CdCit}]^{1-}$ ,  $[\text{CdCit}_2]^{4-}$  with  $\lg K$  3,38, 1,62  
 $[\text{NiCi}]^{2-} = \lg K$  5,27,  $[\text{CdCi}]^{2-} = \lg K$  7,08,  $[\text{ZnCi}]^{2-} = \lg K$  7,44,  
 $[\text{CdCi}]^{2-} = \lg K$  6,23 and  $[\text{CuCi}]^{2-} = \lg K$  13,22.  
 There are 7 figures, 2 tables, and 23 references, 5 of which are Slavic.

ASSOCIATION: Kishinev State University (Kishinevskiy gosudarstvennyy universitet)

SUBMITTED: April 2, 1957

AVAILABLE: Library of Congress

Card 2/2

05861  
SOV/78-4-11-14/50

5(2)  
AUTHORS: Ablov, A.V., Sychev, A.Ya.

TITLE: The Kinetics of Hydrolysis of Halogen Bis-dimethyl Glyoxime Aquocobalt

PERIODICAL: Zhurnal neorganicheskoy khimii, 1959, Vol 4, Nr 11, pp 2485-2494 (USSR)

ABSTRACT: The kinetics of the substitution in the internal coordination sphere of octahedral complexes was thoroughly investigated in connection with the I.I. Chernyayev transition effect as shown by numerous articles (Refs 1-10), among which are publications by Ya.A. Fialkov, V.D. Panasyuk (Ref 5), O.Ye. Zvyagintsev, Ye.F. Shubochkina (Ref 6) and A.A. Grinberg (Ref 7). The authors of this article made a contribution to this field by investigating the hydrolysis of the compounds  $[\text{Co}(\text{H}_2\text{O})(\text{DH})_2\text{Hal}]$  (DH = dimethyl glyoxime, Hal = Cl, Br, J). By means of an SF-4 spectrophotometer, the course of hydrolysis was confirmed according to the reaction  $[\text{Co}(\text{H}_2\text{O})(\text{DH})_2\text{Hal}] + \text{H}_2\text{O} \rightarrow [\text{Co}(\text{H}_2\text{O})(\text{DH})_2]^+ + \text{Hal}^-$ . In order to determine the reaction rate, the



The Kinetics of Hydrolysis of Halogen  
Bis-dimethyl Glyoxime Aquocobalt

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authors made a potentiometric titration of the halogen ions released from the internal sphere (Figs 2,3). Titration took place at 0.18 and 25°C. When measuring the electrical conductivity it was found that the type of the electrode used has a certain influence. Smooth platinum electrodes yielded lower values than platinum electrodes covered with platinum mud which had a catalytic effect (Table 2). The latter has already been detected by L.A. Chugayev (Ref 21). pH-measurement made with the help of a glass electrode and an LP-5 tube amplifier indicated that the pH-value of a solution of  $[\text{Co}(\text{H}_2\text{O})(\text{DH})_2\text{J}]$  changes in the same manner as electrical conductivity (Figs 5,6). The reaction constants calculated by the various methods are in good agreement (Table 1). It was a remarkable detection that the hydrolysis rate of the bromine compound was somewhat lower than that of the chlorine compound, and that that of the iodine compound was the least, whereas the compounds  $[\text{Co}(\text{NH}_3)(\text{DH})_2\text{Hal}]$  showed opposite behavior, i.e. only the iodine compound in the internal coordination sphere was hydrolyzed (Fig 7).

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05861

The Kinetics of Hydrolysis of Halogen.  
Bis-dimethyl Glyoxime Aquocobalt

SOV/78-4-11-14/50

(Abstracter's note: The term "hydrolysis" was substituted for "hydration" used by the author on account of the reaction equation  $\text{complex Hal} + \text{H}_2\text{O} \rightarrow \text{complex}^+ + \text{Hal}^-$  given in this article). There are 7 figures, 2 tables, and 24 references, 10 of which are Soviet.

ASSOCIATION: Moldavskiy filial Akademii nauk SSSR (Moldavian Branch of the Academy of Sciences, USSR)

SUBMITTED: July 2, 1958

Card 3/3

High All-Union Conference on the Chemistry of  
Complex Compounds, Kiev, 1971  
Sov. J. Chem. Phys., 47: 160-173, 1 Nov 1971, 1601

nal sphere of the platinum atom; here, the binding char-  
acter between the platinum and the sphere of coordination is of the  
same order of magnitude as that of a normal covalent bond.  
I. I. Chernyavskiy and A. G. Kuznetsov (Moscow) presented a  
report entitled "Trivalent Complex Compounds of Radium"  
in which they set forth methods of preparing these radi-  
onuclear compounds and established their composition and  
properties. N. K. Pechenkin, G. I. Zinchenko and I. A.  
Savitskaya (Moscow) reported the synthesis of a number of  
complex phosphates and sulfates of radium with the an-  
ions  $\text{Ba}^{2+}$ ,  $\text{Mg}^{2+}$ ,  $\text{Ca}^{2+}$ ,  $\text{Ag}^{+}$ ,  $\text{Zn}^{2+}$ ,  $\text{O}^{2-}$ ,  $\text{S}^{2-}$ ,  $\text{Se}^{2-}$  and  
S. M. Starostin (Moscow) reported on the behavior of water  
in acid-complex nitrate compounds of plutonium. The  
behavior of the water entering into the complex varied,  
depending on the solvent; in organic solvents, the water  
in the compound appears as an ordinary adduct, and in  
aqueous solutions no obvious rapid protolytic dissociation  
of the water in the complex.

A number of works were devoted to study of the com-  
plex compounds of cobalt. A. V. Anisov (Kiev) delivered  
a report entitled "The Transference of Substituents in  
Complex Compounds of Trivalent Cobalt with Dimethylglyoxime"  
and, together with A. Ya. Sychev, "Kinetics of Hydration  
of Halogen-bis-Dimethylglyoxime Aquo-complexes".

SYCHEV, A.Ya.; ABLOV, A.V.; ZARINSKIY, V.A.

High frequency study of the hydration kinetics of halobis (dimethylglyoximate) aquocobaltate(III). Zhur.neorg.khim. 6 no.4:825-829 Ap '61. (MIRA 14:4)

1. Institut khimii Moldavskogo filiala AN SSSR, i Institut geokhimii i analiticheskoy khimii imeni Vernadskogo AN SSSR.  
(Cobalt compounds)

SYCHEV, A.Ya.; ABLOV, A.V.

Kinetics of hydration of dihalo-bis-dimethylglyoximatocobaltate  
ions. Zhur.neorg.khim. 6 no.10:2288-2293 0 '61. (MIRA 14:9)

1. Moldavskiy filial Akademii nauk SSSR, Institut khimii.  
(Cobalt compounds) (Hydration)

SYCHEV, A.Ya.; GERBELEU

Thermodynamics of the reactions of multistep complex formation  
between nickel ions and monoethanolamine. Zhur.neorg.khim. 7  
no.2:269-274 F '62. (MIRA 15:3)

1. Kishinevskiy gosudarstvennyy universitet, kafedra fizicheskoy  
khimii.

(Nickel compounds) (Ethanol)

SYCHEV, A.Ya.; MIGAL', P.K.; Prinimali uchastiye: TIMONINA, L.I.; MIGAL', Ya,P.;  
YERMOLENKO, P.P.

Stability of complex compounds of some metals with phenylalanine,  
lysine and tyrosin. Biokhimiia 27 no.1:25-31 Ja-F '62. (MIRA 15:5)

1. State University, Kishinev.

(ALANINE)

(LYSINE)

(TYROSIN)

(ORGANOMETALLIC COMPOUNDS)

SYCHEV, A.Ya.; GERBELEU, A.P.; MIGAL', P.K.

Thermodynamics of a stepped complex formation of nickel ions with  
triethanolamine. Zhur.neorg.khim. 8 no.9:2070-2073 S '63.  
(MIRA 16:10)



SYCHEV, A.Ya.

Stability of complex compounds of copper, zinc, and cobalt with  
serine. Zhur. neorg. khim. 9 no.10:2343-2346 0 '64.

(MIRA 17:12)

1. Kishinevskiy gosudarstvennyy universitet, Kafedra fizicheskoy  
khimii.

ACCESSION NR: AP4044903

S/0032/64/030/009/1141/1142

AUTHOR: Sy\*chev, A. Ya.; Remenko, S. D.

TITLE: Dielectric meter for measuring small changes in dielectric permeability

SOURCE: Zavodskaya laboratoriya, v. 30, no. 9, 1964, 1141-1142

TOPIC TAGS: electron tube, capacitor, dielectric permeability, dielectric constant, frequency stabilizer, mixer tube, beat frequency principle/ 6Zh4 tube, 6Zh8 tube, 6Ye5S tube, 6Ts4P tube, 6K4P tube, SG 4 gas stabilizer, SG 3 gas stabilizer

ABSTRACT: A compact and simple instrument was designed which is capable of determining dielectric constants with an accuracy of 0.001 in the range 1.5--3. The instrument consists of a standard oscillator (6K4P tube) with quartz frequency stabilizer, smooth generator (6K4P tube) composed of a cell and standard condenser (70 picofarad), a highly sensitive receiver with zero indicator and a power supply. The receiver consists of a regenerative mixer (a 6Zh8 tube) and of a two-cascade audiofrequency amplifier (6Zh8 tubes). The receiver output circuit has an autotransformer coupling with the generator circuit. The receiver amplifier

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38418  
S/089/62/012/006/012/019  
B102/B104

215250

AUTHORS: Zaytsev, L. N., Komochkov, M. M., Sychev, B. S.

TITLE: Attenuation of high-energy neutrons in concrete

PERIODICAL: Atomnaya energiya, v. 12, no. 6, 1962, 525 - 527

TEXT: The intensity losses of fast neutrons passing through special heavy concretes were studied on the synchrocyclotron of the Laboratoriya yadernykh problem Ob'yedinennogo instituta yadernykh issledovaniy (Laboratory for Nuclear Problems of the Joint Institute of Nuclear Research). Previously, such studies had been made only for ordinary concretes. Three types of concrete (densities, 2.35, 3.2, and 4.1 g/cm<sup>3</sup>) were studied, the first being the same as that used in the synchrocyclotron. The neutron flux was determined from the C<sup>11</sup> activity in the concrete. The C<sup>12</sup>(n, 2n)C<sup>11</sup> reaction has a threshold of 20 Mev and a constant cross section in the energy range considered. At E<sub>n</sub> > 20 Mev, the drop of intensity in concrete 20 - 40 cm thick was found to follow an exponential law. The authors' experiments refuted the assumption that the thickness which reduces the intensity to

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KOMOCHKOV, M.M.; SYCHEV, B.S.

Attenuation of a high-energy neutron flux in a shielding. Atom.  
energ. 15 no.4:325-327 0 '63. (MIRA 16:10)

$\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$

[illegible]

4. Author's address: Garkisev, I. V., Candidate of Technical sciences.; Lyonev, B. S., doctor of Technical sciences, Acad. of Sciences.

... ..

<sup>a</sup> Values are means ± SD.

DATE: 1987-06-10; REVISED: 1987-06-10; AUTHOR: J. L. BROWN, JR.; TITLE: THE EFFECT OF THE POLYMERIZATION OF VINYL MONOMERS ON THE GROWTH OF CRYSTALS OF POLYETHYLENE AND POLYPROPYLENE

[illegible]

L 22908-65

ACCESSION NR: AP5001757

show the radiation weakening effect. Five distinguishable types of radiation are encountered from the active zone to the far edge of protection. The formula

$$D(x, \gamma_0, w) = D_1(\gamma_0, x) + D_2(x, \gamma_0, w) + D_3(x, \gamma_0, w) + D_4(x, \gamma_0, w) + D_5(x, \gamma_0, w).$$

is the dosage function related to the five radiation types ( $D_1, D_2, D_3, D_4, D_5$ ) and to the concrete parameters ( $x$  = thickness,  $\gamma_0$  = density,  $w$  = water content). The influence of water content is demonstrated by a plot of accumulation factors

parametric values of concrete density. Ordinary concrete with density of 2300 is found to be most economical. Orig. art. has: 5 figures, 1 table, and 4 equations.

Card 2/5

ACCESSION NR: AP4012262

s/0089/64/016/001/0026/0032

AUTHORS: Broder, D.L.; Zaytsev, L.N.; Sy\*chev, B.S.; Tugolukov, A.M.

TITLE: Effect of water content in concrete on the thickness of the reactor shield and its cost.

SOURCE: Atomnaya energiya, v.16, no.1, 1964, 26-32

TOPIC TAGS: reactor shield, biological reactor protection, reactor shield cost, reactor shield water concentration, optimal reactor protection

ABSTRACT: The purpose of the present work is to determine the economical aspect of the increasing amount of water in concrete for reactor shieldings. Increasing the water content in concrete increases its hydrogen concentration which effectively reduces the leakage of fast and intermediate neutrons because of the large cross section of hydrogen for fast and intermediate neutrons. Various types of concrete used for reactor shieldings have hydrogen concentration within the 12% range. The authors have computed the biological protection

Card 1/2

L 1928-66 EWT(m)/EPF(n)-2/EWG(m)/EWA(h)/EWA(1) DM

ACCESSION NR: AP5023779

UR/0089/65/019/003/0303/0307  
621.039.538.7

AUTHOR: Zaytsev, L. N.; Lavdanskiy, P. A.; Mal'kov, V. V.; Sychev, B. S.

TITLE: Shielding parameters of concretes ✓

SOURCE: Atomnaya energiya, v. 19, no. 3, 1965, 303-307

TOPIC TAGS: concrete, neutron shielding, radiation shielding, neutron absorption, neutron cross section, gamma ray absorption

ABSTRACT: On the basis of literature data, a survey of the shielding parameters of concretes is given in the form of graphs and tables. The chemical composition of the basic materials used as fillers for concretes and some of their shielding parameters are tabulated. Another table lists the mass attenuation factors for  $\gamma$  radiation (which are the same for most of these materials except water, borate ore, boron carbide, baryta, and steel). A nomogram for the calculation of removal cross sections of fast neutrons in concretes and a table of macroscopic neutron removal cross sections of the elements included in the composition of the concretes are given. Other illustrated relationships are the variation of the inelastic interaction cross section of ultrafast neutrons with the iron content of concretes, and the dependence of thermal neutron absorption cross

1/2



L 1928-66

ACCESSION NR: AP5023779

sections on the boron and iron content of concretes. Orig. art. has: 3 figures and 4 tables.

ASSOCIATION: none

SUBMITTED: 20Jul64

ENCL: 00

SUB CODE: NP, MT

NO REF SOV: 009

OTHER: 005

*ml*  
2/2

AP6032250 (4) SOURCE CODE: UR/0097/66/000/007/0032/0034 2/

AUTHOR: Zavtsev, L. N. (Candidate of technical sciences); Lavdanskiy, P. A.;  
Mal'kov, V. V.; Sychev, B. S.

ORG: none

TITLE: Role of boron-containing concretes as nuclear reactor shields 10

SOURCE: Beton i zhelezobeton, no. 7, 1966, 32-34

TOPIC TAGS: boron, concrete, nuclear shielding, biological shielding

ABSTRACT: The addition of boron to biological shielding made from ordinary concrete reduces its thickness by 27% when the content of chemically combined water is low, and by 23% when the amount of water in the concrete is  $75 \text{ kg/m}^3$  (with a dosage ratio of  $D_1^0/D_2^0 = 10^{-3}$ ). Maximum reduction in shielding thickness due to the addition of boron to heavy concrete for ore-filled concrete with a volumetric weight of  $3200 \text{ kg/m}^3$  is 3% (when the ratio between the dosages is  $D_1^0/D_2^0 = 10^{-1}$ ). Thus, the addition of boron is not economically advantageous, since it results in only a small savings in concrete. Exceptions are reinforced

Cord 1/2

UDC: 666.974

L 09873-67

ACC NR: AP6032250

concretes with a very small amount of water or those entirely without combined water, such as heat-resistant concretes. [Authors' abstract]

SUB CODE: 06, 11/ SUBM DATE: none/ ORIG REF: 005/ OTH REF: 003/

Card 2/2<sup>11</sup>

L 28845-66 EPF(n)-2/EWA(h)/EWP(j)/EWT(m)/ETC(f)/EWG(m)/EWA(l) RM  
 ACC NR: AP6013737 (A) SOURCE CODE: UR/0089/66/020/004/0355/0355  
 AUTHOR: Sychev, B. S.; Mal'kov, V. V.; Komochkov, M. M.; Zaytsev, L. N.  
 ORG: None  
 TITLE: Passage of high-energy neutrons through a heavy concrete shielding 14 15 38 8  
 SOURCE: Atomnaya energiya, v. 20, no. 4, 1966, 355-356  
 TOPIC TAGS: neutron energy distribution, neutron shielding, nuclear shielding, concrete  
 ABSTRACT: The authors present in a brief form the results of their experiments, conducted in the OIYaI synchrocyclotron laboratory, on shielding consisting of a series of slabs (53 mm thick). The slabs are made of heavy (hematite) concrete having a density of 3480 kg/cu m. The chemical composition of concrete slabs is given, being expressed in percent by weight. The content of hydrogen is 0.35wt.%. The experimental data characterizing the neutron attenuation for different energy groups are plotted for various concrete thicknesses (up to 4000 kg/sq m). The neutron groups include high-energy neutrons ( $E > 20$  Mev), fast neutrons 2 to 20 Mev, intermediate neutrons ( $E$  about 1.44 ev). These three  
 Card 1/2 UDC: 621.039.512.45

L 28845-66

ACC NR: AP6013737

groups were tested in the concrete containing 0.35wt% of hydrogen. In addition, the behavior of intermediate neutrons was investigated for 0.7 and 1wt% of hydrogen content. A table is presented giving neutron attenuation lengths ( $\lambda$ , kg/m<sup>2</sup>) for concrete of 1500 to 5000 kg/sq m thickness with respect to various energy levels of protons bombarding a beryllium target. The table contains also the calculated ratio  $\lambda/\lambda_{in}$  (where  $\lambda_{in}$  is the length of inelastic interaction with neutron nuclei of energy higher than 100 Mev). The authors conclude that the attenuation of high-energy neutrons (several hundred Mev) is characterized by the relaxation length defined by the equation:  $\lambda \approx (1.3 \pm 0.1) \lambda_{in}$ . The factors characterizing the accumulation of intermediate neutrons in concrete with various hydrogen contents are also presented in a table. Orig. art. has: 2 tables and 1 graph.

SUB CODE: 18,20 / SUBM DATE: 18Nov65 / ORIG REF: 003 / OTH REF: 000

Card 2/2 CC

L 06454-67 ENT(m)/EWP(t)/ETI IJP(c) JD/JR  
ACC NR: AP6024543 SOURCE CODE: UR/0089/66/021/001/0056/0057

AUTHOR: Zaytsev, L. N.; Komochkov, M. M.; Mal'kov, V. V.; Cherevatenko, Yeg. P.; Sychev, B. S. 35  
33

ORG: none X

TITLE: Attenuation of high-energy neutron fluxes by heterogeneous shields 19

SOURCE: Atomnaya energiya, v. 21, no. 1, 1966, 56-57

TOPIC TAGS: reactor shielding, reactor neutron flux, neutron absorption

ABSTRACT: The authors present results of experimental investigations of the distribution of neutron fluxes of varying energy groups in layered shields. The investigations were made with the OIYAI synchrocyclotron in a neutron flux obtained by bombarding a beryllium target with 660-Mev protons. The geometry of the experiment is described elsewhere (Atomnaya energiya v. 12, 525, 1962). The neutron fluxes were registered with threshold detectors of  $\text{In}^{115}$ ,  $\text{P}^{31}$ , and  $\text{C}^{12}$ , which were briefly described earlier (Atomnaya energiya v. 20, 323, 1966). X ray films of individual gamma dosimeters were also used. The following shield combinations were used: iron<sup>1</sup>/water, iron - heavy concrete, and water - iron - water. An analysis of the measured attenuation produced by these shields leads to the conclusion that the presence of the first layer does not influence the character of attenuation of the neutron flux in the second layer. Secondary effects connected with resonant neutrons produced at the boundary of the two materials are discussed. It is recommended that the second layer

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be made of hydrogen-containing material to reduce the effect of accumulation of intermediate neutrons in heavy materials. The authors thank Z. Tsisek and A. P. Chervatenko for help with the experiments. Orig. art. has: 3 figures and 3 formulas.

SUB CODE: 18/ SUBM DATE: 22Feb66/ ORIG REF: 005

ACC NR: AM6023941

Monograph

UR/

Broder, D. L.; Zaytsev, L. N.; Komochkov, M. M. Mal'kov, V. V.;  
Sychev, B. S.

Concrete in the shielding of nuclear installations (Beton y zashchite yadarnykh ustanovok) Moscow, Atomizdat, 1966. 239 p. illus., biblio., tables. 2050 copies printed.

TOPIC TAGS: accelerator, concrete, nuclear engineering, nuclear radiation, radiation shielding, reactor shielding

PURPOSE AND COVERAGE: This book is intended for designers of nuclear devices and readers working in the nuclear industry. Methods and techniques for swift evaluation of various nuclear shieldings are presented. Approximate methods of calculating concrete shieldings are covered in the following sequence: the determination of emitted radiation and its distribution, of the distribution of radiation fluxes along the thickness of the shield, and of the permissible radiation levels beyond the shield. Particular attention is given to the shieldings of high-power accelerators. Prof. A. N. Komarovskiy and Docent V. B. Dubrovskiy provided advice, and A. V. Kudryavtseva, A. M. Tugolukov, V. S. Kiselev, and P. A. Lavdanskii cooperated.

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UFG. 621.030.538



ACQ NR: AM6023941

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SUB CODE: 18// SUBM DATE: 16Feb66/ ORIG REF: 108/ OTH REF: 116

Card 2/2

KUBANIN, Yu.Z., inzh.; SAZONOV, G.G., inzh.; MIKHAILOV, N.A., tekhnik;  
SMIRNOVA, A.V.; tekhnik; SYCHEV, G.A., tekhnik

Automation of the removal and quenching of cinders from "fluidized  
bed" process furnaces. Mekh. i avtom. proizvod. 15 no.3:14-17 Mr '61.  
(MIRA 14:3)

(Automation) (Metallurgical furnaces)

KARAVANOV, G.G., prof.; SYCHEV, G.G.

Venous thrombosis and the postphlebitic syndrome of the lower  
extremities. Nauch.trudy L'vov.obl.terap.ob-va no.1:34-40 '61.

(MIRA 16:5)

1. Klinika fakul'tetskoy khirurgii lechebnogo fakul'teta L'vov-  
skogo meditsinskogo instituta (zav. kafedroy - prof. G.G. Karavanov).  
(THROMBOSIS) (PHLEBITIS)  
(EXTREMITIES, LOWER-DISEASES)

SYCHEV, G.G. (L'vov)

Mechanical jaundice in abdominal lymphogranulomatosis. Klin.  
med. 39 no.4:140-141 '61. (MIRA 14:4)

1. Iz 2-go khirurgicheskogo otdeleniya (zav. - prof. G.G. Karavanov) L'vovskoy oblastnoy klinicheskoy bol'nitsy (glavnyy vrach N.I. Besedin) i kafedry fakul'tetskoy khirurgii lechenogo fakul'teta (zav. - prof. G.G. Karavanov) L'vovskogo meditsinskogo instituta (dir. - prof. L.N. Kuzmenko)  
(HODGKIN'S DISEASE) (JAUNDICE)

SYCHEV, G.G.

Phlebography and its significance in the diagnosis of a  
postphlebitic syndrome. Vest. rent. i rad. 37 no.1:62-63  
Ja-F '62. (MIRA 15:3)

1. Iz 2-go khirurgicheskogo otdeleniya i kafedry fakul'tetskoy  
khirurgii lechebnogo fakul'teta (zav. - prof. G.G. Karavanov)  
L'vovskoy oblastnoy klinicheskoy bol'nitsy i L'vovskogo meditsinskogo instituta.

(ANGIOGRAPHY)

(PHLEBITIS)

SYCHEV, G.G.

Serial intravenous ascending functional phlebography of the lower extremities with the patient in vertical position. Vest. rent. 1 rad. 40 no.5:63 S-Q '65.

(MIRA 18:12)

1. Klinika fakul'tetskoy khirurgii lechebnogo fakul'teta (zav. - prof. G.G.Karavanov) L'vovskogo meditsinskogo instituta i klinika gosital'noy khirurgii (zav. - prof. G.N.Luk'yanov) Kubanskogo meditsinskogo instituta, Krasnodar.

BUKOV, V.A., BYKOV, L.A., VALUK, V.A., VARTBARONOV, R.A., ZHILIS, E.F.,  
KONDRAKOV, V.M., KUZ'MIN, V.A., SYCHEV, G.I., FROLOV, N.I.,  
FOKIN, A.S., KHARINSKIY, A.N. (Saratov)

New method for producing stable neurogenic hypertension in dogs  
[with summary in English]. Arkh.pat. 20 no.5:21-27 '58 (MIRA 11:6)  
(HEART, anatomy and histology,  
thebesian vessels, review (Rus))

SYCHEV, I. A., LEONOV, F. I.

Electric Power Plants

From the experience of an outstanding repair brigade. Rab. energ. 2 No. 5. (1952)

Monthly List of Russian Accessions, Library of Congress, August, 1952. Unclassified.



17.1160

83533  
S/112/59/000/015/040/068  
A052/A002

Translation from: Referativnyy zhurnal, Elektrotehnika, 1959, No. 15, p. 163,  
# 32112

AUTHORS: Kerbunov, V.V., Sychev, I.A.

TITLE: A Tubular Manometric Spring for Pneumatic Feedback Systems

PERIODICAL: Nauchno-tekhn. byul. N.-1. in-t teplo-energ. priborostr., 1958,  
No. 1 (40), pp. 5-9

TEXT: A new design of a manometric spring for pneumatic feedback systems is described. The spring is made of a band profiled in the shape of a manometric tube with a side capillary channel along the entire length of the tube. The cavities of the capillary and the tube are separated by a seam made by continuous resistance welding. The new tube does not require a difficult manufacturing technology and enables to use alloys unsuitable for deep drawing. Compared with conventional tubes it has a lower non-linearity, hysteresis and the magnitude of the temperature error is lower by a factor of 4. It is pointed out

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S/112/59/000/015/040/068  
A052/A002

A Tubular Manometric Spring for Pneumatic Feedback Systems

that calculations usually applied to manometric springs result in great errors for the new spring design which is explained by the peculiarity of its shape and by the character of stress distribution. There are 4 illustrations.

M.L.P.

Translator's note: This is the full translation of the original Russian abstract.

X

Card 2/2

25 (0), 28 (1)  
AUTHORS: Kerbunov, V. V., Engineer, Sychev, I. A. SOV/119-59-6-9/18

TITLE: Unification of Manometric Thermometers and Manometers With  
Pneumatic Transmission on Secondary Instruments and Control  
Devices (Unifikatsiya manometricheskikh termometrov i mano-  
metrov s pnevmaticheskoy peredachey na vtorichnyye pribory i  
reguliruyushchiye ustroystva)

PERIODICAL: Priborostroyeniye, 1959, Nr 6, pp 20 - 22 (USSR)

ABSTRACT: In recent years NII Teplopribor (Scientific Research Institute for  
Thermal Power Instruments) has conducted comprehensive studies on the unifica-  
tion of the following series of measuring instruments: 1) mano-  
metric scale thermometers TPG-2p with gas filling, TPR-2p with  
mercury filling, TPZh-2p with liquid; 2) manometric thermome-  
ters without scale TPG-1n (gas filling), TPR-1p (mercury fill-  
ing), TPZh-1p (liquid filling); 3) spring manometer with scale  
MPP-2 and without scale MPP-1; 4) spring vacuum-meter VPP-2  
with scale, VPP-1 without scale; 5) spring mano-vacuum-meter  
MVPP-2 with scale, MVPP-1 without scale, and 6) the PBP-1 pneu-  
matic amplifier, by which the transmission of the indications  
is effected in all instruments mentioned. Figure 1 shows the  
operational principle of the instruments and the pneumatic

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Unification of Manometric Thermometers and Manometers SOV/119-59-6-9/18  
With Pneumatic Transmission on Secondary Instruments  
and Control Devices

transmission of the indication. Figure 2 shows the scheme of unification. The group covers 346 instruments, classified according to precision and measuring range; only 220 constructional parts were required for them. By a tube spring with a new profile (Fig 3) the error limit of the thermometers was decreased to 2% of the measuring range. The new pneumatic amplifying relay allows the transmission of the indication to 300 m. The measuring ranges lie between -40 to +500°C for gas thermometers, between -30 to +600°C for mercury thermometers, and between -40 to +200° for liquid thermometers. The application of xylene is expected to widen the range of liquid thermometers to +400°. The measuring instruments have proved successful in official and practical tests. There are 3 figures and 1 table.

Card 2/2

SYCHEV, I.A.

The TPG-1, TPR-1, and TPZh-1-type dial manometric thermometers.  
Bul.tekh.-ekon.inform. no.7:33-36 '58. (MIRA 11:9)  
(Thermometers)

06182

SOV/115-59-11-10/36

25 (1)

AUTHOR: Sychev, I.A.

TITLE: New S-Shaped Springs for Pressure Gages

PERIODICAL: Izmeritel'naya tekhnika, 1959, Nr 11, pp 29-31

ABSTRACT: The author describes S-shaped tubular springs for pressure gages and the technology for their manufacture. The S-shaped springs were developed by NIITeplopribor, where also the experimental models were manufactured from 30KgGSA steel. For winding the springs, a device, as shown in Fig 2, is used. These tubular springs have the advantage that the displacement of their free end is linear and not arc-shaped as with conventional pressure gage springs. The nonlinearity of the characteristic of the free end remains within the limits of 0.5-1.5%. The hysteresis does not exceed 1% of the maximum value of the working stroke which is 5-6 mm. S-shaped tubular springs may be used also in gas and liquid thermometers and related devices. The author states that the metrological and mechanical data of these springs may be im-

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D201/D305

10.1410

AUTHORS: Koldobskaya, T.G. and Sychev, I.A.  
TITLE: Irregular shock-wave reflection on curvilinear wall  
PERIODICAL: Leningrad. Universitet. Vestnik. Seriya matematiki, mekhaniki i astronomii, no. 3, 1961, 111-120

TEXT: The effect is investigated of the curvature of a cylindrical reflecting wall on the pressure exerted on it by the diffraction and irregular reflection of a plane shock wave. The method of T. G. Koldobskaya (Ref. 7: Zadacha o neustanovivshemsya dvizhenii, blizkom k avtomodel'nomu. Vestnik Leningr. un-ta, no. 1, 111-122, 1960) is adopted, based on the assumption that the investigated flow resembles a self-simulating progressive flow which arises by reflection of the same shock wave on a wedge nearly similar to the cylindrical surface. The profile (of small curvature) of the cylindrical surface is  $y = \operatorname{tg} \omega \cdot x + c_1 x^\alpha$  (1.1) where  $\omega$  is the semi-angle of the wedge;  $c_1$  and  $\alpha$  are constants chosen in accordance with the shape of the profile. The problem

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Irregular shock-wave...

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of irregular reflection of the same shock wave on the wedge  $y = tg \omega$ .  $x$  is considered to have a known solution. The flow determined by that solution is called self-simulating. The sought after functions are:  $u, v$  - the projections of the velocity  $w$  on the  $x$ - and  $y$ -axes (Fig. 1);  $p$  - the pressure;  $\rho$  - the density. In its general formulation, the problem can be numerically solved by the method of nets. The author proceeds to determine the flow parameters for an actual profile of type (1.1). With some additional assumptions, the problem is readily solved by the above method and the results for the line MS (Fig. 1) which are important in practice, can be obtained analytically. To obtain the initial data for computations and verifying the basic assumption of the method, experiments in a shock tube were conducted. The parameters of the waves and flow were found from photographs taken by means of the Tepler apparatus. A comparison of shadowgraphs showed that the fronts of the waves reflected by the wedge and by the cylindrical wall practically coincide. The difference in the corresponding Mach waves is small. The flow parameters on surface of reflecting wall are determined. For  $\bar{\sigma}$  (which characterizes the change in entropy of the flow near the

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Irregular shock-wave...

wedge) the expression

$$\bar{\sigma} = e^{\int_{s_0}^s r(s)ds} \left[ \bar{\sigma}_0 + \int_{s_0}^s q(s) e^{-\int_{s_0}^s r(s)ds} ds \right], \quad (3.7)$$

is obtained as the solution of a differential equation. The solution for  $\bar{p}$  is

$$\bar{p} = \frac{p_0}{p_{OM}} \left[ \bar{p}_M + \int_{s_M}^s F(s) \frac{p_{OM}}{p_0} ds \right]. \quad (3.9)$$

The greatest change in the flow parameters for the cylindrical profile as compared to the wedge, takes place on the line MS (Fig. 1). The maximum change in parameters at M, compared with existing values for shock reflection by the wedge, constitutes: For pressure - 30%, for density - 15% and for velocity - 29%. The parameters were determined to within an accuracy of 10%. There are 5 figures and 8 references: 5 Soviet-bloc and 3 non-Soviet-bloc. The references to the English-language publications read as follows: M.J. Lighthill. The diffraction of blast I. Proc. Roy. Soc., A 198, 454-470, London, 1949; H.F. Ludloff, M.B. Friedman. Aerodynamics of blasts diffrac-

Card 3/4



1. YAKOVLEV, G. I. SYCHEV, I. G.
2. USSR (600)
3. Loading and Unloading
4. Mechanized loading of containers with red bricks on trucks.  
Gor. khoz. Mosk. No. 11 - 1952

9. Monthly List of Russian Acquisitions, Library of Congress, February, 1953. Unclassified.

SYCHEV, I.A.

Temperature error of liquid manometric thermometers and methods for compensating this error. Izv.tekh. no.10:26-32 0 '61.

(MIRA 14:11)

(Thermometers--Testing)

RAZIN, V.A., inzh.; SYCHEV, I.A., inzh.

Normal series of measuring membranes, membrane cases, and  
blocks. Priborostroenie no. 11:24-26 N '65.

(MIRA 18:12)

1. YAKOVLEV, G.I., SYCHEV, I.G.
2. USSH(600)
4. Brickmaking
7. Mechanizing the loading of containers with bricks in brick plants.,  
Stek.i ker., 9, No.11, 1952

9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

SYCHEV, I.I., inzhener.

Plaster cement injection of water intake shafts at the Mingeaur  
Hydroelectric Power Station. Gidr. stroi. 26 no.4:15-16 Ap '57.  
(Concrete construction) (MIRA 10:6)  
(Mingeaur Hydroelectric Power Station)

SYCHEV, Ivan Nikolayevich,; MARTYNOV, P.T., nauchnyy red.; VAGANOVA,  
N.A., red.; BABICHEVA, V.V., tekhn. red.

[Prefabricated reed-panel houses and how to market them] Sbornye  
zhilye doma iz kamyshita i organizatsiya trgovli imi. Moskva, Gos.  
izd-vo tog. lit-ry, 1958. 94 p. (MIRA 11:12)  
(Building materials)  
(Buildings, Prefabricated)



RYZHKOV, I.V., kand. tekhn. nauk; SYCHEV, I.S., inzh.

Improving the shakeout of water glass mixtures. Mashinostroenie  
no.5:47-50 S-O '63. (MIRA 16:12)

1. Khar'kovskiy politekhnicheskij institut.

SYCHEV, K. A.

"Elementary Method for the Computation of Heat Balance in Ground".  
Meteorol. i gidrologiya, No 6, pp 25-27, 1954.

The method is based on direct measurements of temperature in ground. The scheme of computation of the coefficient of temperature conductivity ( $\alpha$ ) is copied from V. B. Shtokman's method for determining the heat balance of the sea. Representing the equation of heat conduction in the form of finite differences, the author obtains a formula for the determination of the coefficient  $\alpha$  in the limit of  $\Delta t$ . He also gives a formula for determining the mean coefficient of temperature conductivity  $\bar{\alpha}$  over a longer period of time. The computations of heat balance are conducted on the assumption that part of the heat obtained by the upper groundlayer ( $Q$ ) goes to change the heat content of this layer ( $q_1$ ), and another part ( $q_2$ ) spreads to the lower layers. He obtains an expression for  $Q$ . (RZhGeol, No 10, 1955)

SO: Sum No 884, 9 Apr 1956

SYCHEV, K.A.

Three hundred and sixty-six days on a floating ice island.  
Probl.Arkt. no.4:108-109 '58. (MIRA 11:12)

1. Nachal'nik stantsii "Severnny polyus-6."  
(Arctic Ocean--Oceanographic research)

SYCHEV, K.A.

The floating ice island of the station "North Pole 6." Probl.  
Arkt. no.5:121-124 '58. (MIRA 13:5)  
(Arctic Ocean--Ice)

SYCHEV, K.A., red.; FROLOV, V.V., red.; DROZHZHINA, L.P., tekhn. red.

[Materials of observations completed by the research drift stations "North Pole 4," "North Pole 5," and "North Pole 6" in 1956-1957] Materialy nabliudeni nauchno-issledovatel'skikh dreifuishchikh stantsii "Severnyi polius-4," "Severnyi polius-5," "Severnyi polius-6" 1956/57 goda. Pod red. K.A.Sycheva. Leningrad, "Morskoi transport," 1959. 647 p. (MIRA 14:7)

1. Leningrad. Arkticheskiy i antarktiicheskiy nauchno-issledovatel'skiy institut.

(Arctic Ocean—Meteorology—Observations).

SYCHEV, K.A.

Heat balance of the active layer of permafrost in  
summer. Probl.Arkt.i Antarkt. no.1:87-93 '59.  
(MIRA 13:7)  
(Arctic regions--Frozen ground)

SYCHEV, K. A .

Three years of drift on the floating ice island "Severnyi  
polius-6." Mor.flot 19 no.4:21-23 Ap '59. (MIRA 12:6)

1. Rukovoditel' otдела Arkticheskogo i Antarkticheskogo nauchno-  
issledovatel'skogo instituta.  
(Arctic regions--Drift)

BAKALOV, S.A.; DERYUGIN, B.A.; SYCHEV, K.A.

Radiation and heat balance of the surface of dry land in  
the Arctic. Trudy GGO no.92:102-126 '59.

(MIRA 13:5)

(Amderma region--Soil temperature)



SYCHEV, K.A.

Heat content of Atlantic waters and the expenditure of heat in the  
Arctic Basin. Probl.Arkt.i Antarkt. no.3:5-15 '60.

(MIRA 13:9)

(Arctic regions--Ocean temperature)

SYCHEV, Konstantin Arsent'yevich; ANDREYEVA, L.S., red.; LAVRENOVA, N.B.,  
tekhn. red.

[On a drifting ice floe] Na dreifuishchem ledianom ostrove. Moskva, Izd-vo "Morskoi transport," 1961. 112 p. (MIRA 14:12)  
(Arctic regions--Russian exploration)

DVOSKINA, G.I.; ANDREYEVA, N.N.; SYCHEV, K.A., red.; ANDREYEVA, T.P., red.;  
KOTLYAKOVA, O.I., tekhn.red.

[Materials from observations at drifting research stations North Pole-6 and North Pole-7 in 1958-1959] Materialy nabliudeni nauchno-issledovatel'skikh dreifuishchikh stantsii "Severnyi polius-6," "Severnyi polius-7" 1958/59 goda Leningrad, Izd-vo "Morskoi transport," 1963. 709 p. Leningrad. Arkticheskii i antarkticheskii nauchno-issledovatel'skii institut. Trudy, vol.251). (MIRA 16:5)

(Arctic regions--Meteorology--Observations)  
(Arctic regions--Actinometry--Observations)

DUBROVIN, L.I.; SYCHEV, K.A.

An obsolete manual. Okeanologiya 3 no.5:949 '63. (MIRA 16:11)

WILSON, K.A., vol.; BROWN, L.A., vol.

(Materials on the observations of research drifting stations  
"North Pole 4" and "North Pole 3," 1951-1960. Materialy  
nauchno issledovatel'skikh дрейфующих  
станций "Северный полюс-4" и "Северный полюс-3," 1951-1960. 1.  
644 p. Moskva, izdatvo "Transport," 1964. 644 p. (Leningra  
Arkticheskiy i Antarktiicheskiy nauchno-issledovatel'skiy institut.  
Trudy, vol. 260) (KIN 100)

SYCHEV, K.A., red.; ZHDANOVA, T.A., red.

[Materials of the observations of the "North Pole-8" and "North Pole-9" research drifting stations in 1960-1961.]  
Materialy nabliudeniinauchno-issledovatel'skikh dreifuiushchikh stantsii "Severnnyi polius-8" i "Severnnyi polius-9" 1960-1961 goda. Moskva, Izd-vo "Transport," 1964. 589 p. (Leningrad. Arkticheskii i Antarkticheskii nauchno-issledovatel'ski institut. Trudy, vol. 261).

SY JHEV, K.A., red.; ZHDANOVA, T.A., red.

[Materials on observations of the research drifting stations  
"Severnyi Polius-8" and Severnyi Polius-9" in 1960-1961.]  
Materialy nabludenii nauchno-issledovatel'skikh dreifuiushchikh  
stantsii "Severnyi polius-8" i "Severnyi polius-9" 1960/1961 g.  
Moskva, Izd-vo "Transport," 1964. 598p. Leningrad. Arkticheskiy  
i Antarkticheskiy nauchno-issledovatel'skiy institut. Trudy,  
vol.272) (MIRA 17:9)

SYCHEV, K.A., red.; BIKULOVA, R.I., red.

[Materials of the observations of a drifting research station "North Pole-8," 1959-1960.] Materialy nabludeni nauchno-issledovatel'skoi dreifuishchei stantsii "Severnyi polius" 1959/60 goda. Leningrad, Izd-vo "Morskoi transport," 1963. 294 p. (Leningrad. Arkticheskii i antarkhticheskii nauchno-issledovatel'skii institut. Its Trudy, vol. 270)



SYCHEV, K.I.

Approximative method of estimating water inflows into mine workings.  
Razved. i okh. nedr 26 no.9:45-49 3 '60. (MIRA 15:7)

1. TSentral'no-Kazakhstanskoye geologicheskoye upravleniye.  
(Mine water)

SYCHEV, K.I.; ISHMAKOV, K.I.; ZHUKOV, M.I.; CHYMACHENKO, Yu.T.

New data on the hydrogeology of the northern Lake Balkhash region.

Mat.po geol.i pol.iskop.TSentr.Kazakh, no.2:85-95 '62.

(MIRA 15:12)

(Balkhash Lake region--Water, Underground)

SYCHEV, K.I.

Formation of reserves of ground waters in central Kazakhstan valleys. Razved. i okh. nedr 29 no.5:46-51 My '63.

(MIRA 16:7)

1. Tsentral'no-Kazakhstanskoye geologicheskoye upravleniye.  
(Kazakhstan—Water, Underground)

MERKOV, B.P. (Moskva); GAUKER, Z.Ye. (Moskva); KOBELEV, M.V.; SYCHEV, K.I.  
(Karaganda); UMAROV, M.U. (Moskva); SHUTLIV, F.A., kand.geol.-  
mineral.nauk

News, events, facts. Priroda no.12:99-109 D '62.

(MIRA 15:12)

1. Donetskaya geologicheskaya partiya, Novo-Troitskoye, Donetskaya  
obl. (for Kobelev). 2. Tsentral'nyy sovetskiy Vserossiyskiy obshchestva  
okhrany priroda, Moskva (for Shutliv).  
(Science news)

MIKHAYLOV, Yu.I.; SAGUYCHENKO, I.K.; SYCHEV, K.P.; TRUBCHANINOV, I.D.

Electrotensimeter for studying the parts of conveying apparatus.  
Sbor. nauch. trud. KGRI no.19:117-123 '62. (MIRA 16:5)

(Conveying machinery—Testing) (Tensiometers)

ROZHDESTVENSKIY, B.A., general-lejtenant zapasa; RUBLEV, S.T., general-mayor v otstavke; SIMVOLOKOV, V.N., general-mayor v otstavke; ZHRAVLEV, P.M., general-mayor v otstavke; SYCHEV, K.V., general-mayor, red.; MALAKHOV, M.M., polkovnik, red.; GNEDOVETS, P.P., polkovnik zapasa, red.; ZUDINA, M.P., tekhn. red.

[Attack in a wooded-swampy and in a wooded-mountainous locality; collection of tactical examples of the attack of a rifle unit in the Great Patriotic War in 1944] Nastuplenie v lesisto-bolotistoi i gorno-lesistoi mestnosti; sbornik takticheskikh primerov nastuplenia voisk strelkovogo korpusa po opytu Velikoi Otechestvennoi voiny v 1944 g. Moskva, Voen. izd-vo M-va oborony SSSR, 1961. 203 p. \_\_\_\_ [Album of diagrams] Al'bom skhem. 14 diagrams. (MIRA 15:2)  
(Attack and defence (Military science))

SHISHKIN, Nikolay Fedorovich, kand.tekhn.nauk; OLEKSEVICH, Valeriy Pavlovich;  
DANILIN, Petr Yakovlevich; MIKHEYEV, Yuriy Aleksandrovich; SYCHEV,  
~~Leonid Ivanovich~~, Prinsipali uchastiye: SHALAGINOVA, T.S., inzh.;  
SMORODINSKIY, Ya.M., kand.tekhn.nauk; KALINICHENKO, M.F., inzh.;  
CHASHKIN, Ye.V., inzh.; ASTAF'YEV, V.D., inzh.; PROKOP'YEV, V.I.,  
vedushchiy konstruktor; HOGOV, V.A., starshiy master; MOSKALENKO, V.M.,  
laborant; GERASIMOV, N.F., laborant; POPOV, N.A., kand.fiziko-matem.  
nauk; KALINICHENKO, M.F., inzh.; LYUBIMOV, N.G., otv.red.; ALADOVA,  
Ye.I., tekhn.red.; PROZOROVSKAYA, V.L., tekhn.red..

[Protection of the electric equipment and cable networks in mines]  
Zashchita shakhtnykh elektroustanovok i kabel'nykh setei. Pod red.  
N.F.Shishkina. Moskva, Ugletekhizdat, 1959. 242 p. (MIRA 12:3)  
(Electricity in mining) (Electric cables)

Z/019/61/018/011/001/005  
D006/D102

AUTHORS: Tsapenko, E. F. and Sychev, L. I.

TITLE: Transistorized instruments for checking the insulation of three-phase networks with insulated neutral by a tension up to 1000 v

PERIODICAL: Přehled technické a hospodářské literatury, Energetika a elektro-  
technika, v. 18, 1961, no. 11, 499, abstract # E 61-6901. Prom.  
Energ. 16, July 1961, no. 7, 32-35

TEXT: The article presents an analysis of the transistor circuit diagrams of insulation checking instruments, including the basic triode diagram, a bridge diagram, bridge diagrams with a trigger relay and with a trip relay, and a bridge diagram with a switch. The original article contains 5 figures and 5 references.  
[Abstracter's note: The above text is a full translation of the Czech abstract]

Card 1/1



GREYSUKH, M.V.; YERMILOV, A.A.; ZALESSKIY, Yu.Ye.; KAZYMOV, A.A.;  
KATSEVICH, L.S.; KIRPA, I.I.; KIREYEV, M.I.; KNYAZEVSKIY,  
B.A.; KOFMAN, K.D.; KRZHAVANIK, L.V.; KUZNETSOV, P.V.;  
MOROZOV, K.S.; RAKOVICH, I.I.; RYABOV, M.S.; SVENCHANSKIY,  
A.D.; SOKOLOV, M.M.; SYCHEV, L.I.; TVERDIN, L.M.; KHEYFITS,  
M.E.; SHULIMOV, Ye.V.; EPSHTEYN, L.M.; SHCHEGOL'KOV, Ye.I.;  
TSAPENKO, Ye.F.; FEDOROV, A.A., glav. red.; SERBINOVSKIY, G.V.,  
red.; BOL'SHAM, Ya.M., red.; BRANDENBURGSKAYA, E.Ya., red.;  
TVERDIN, L.M., red.; FRIDKIN, L.M., tekhn. red.

[Handbook for power engineers of industrial enterprises in  
four volumes] Spravochnik energetika promyshlennykh pred-  
priyatii v chetyrekh tomakh. Moskva, Gosenergoizdat.  
Vol.2. [Electric-power supply (conclusion), use of electric  
power and electrical equipment in some branches of industry]  
Elektrosnabzhenie (okonchanie), priemniki elektroenergii i  
elektrooborudovanie nekotorykh otraslei promyshlennosti. Pod  
obshchei red. A.A.Fedorova (glav. red.), G.V.Serbinovskogo i  
I.A.M.Bol'shama. 1963. 880 p. (MIRA 16:7)

(Power engineering—Handbooks, manuals, etc.)

(Electric power distribution)

MIKHEYEV, Yu.A.; SYCHEV, L.I. Prilimniye uchastiye MURTOH, Yu.M.;  
OSTAPENKO, V.A.; kand. tekhn. nauk, reitsenzent; FROLOVA,  
Ye.I., ved. red.

[Electric networks in mining enterprises] Elektricheskie se-  
ti gornykh predpriyatii. Moskva, Nedra, 1964. 240 p.  
(MIRA 18:3)

1. SYCHEV, M.
2. USSR (600)
4. Public Health - Turkey
7. Results of American management in Turkey, Sov. kras. krest 3, No. 1, 1953.

9. Monthly List of Russian Accessions, Library of Congress, May 1953. Unclassified.

TKACHENKO, Grigoriy Georgiyevich; SYCHEV, M., red.; SUKHAREVSKAYA, N.,  
tekhn. red.

[Heroic work of Donets Basin miners; the struggle of Donets Basin  
party organizations for the restoration of coal mining during the  
postwar five-year plan] Podvig shakhterov Donbassa; partiinye or-  
ganizatsii Donbassa v bor'be za vosstanovlenie ugol'noi promyshlen-  
nosti v gody poslevoennoi piatiletki. Khar'kov, Luganskoe obl. izd-  
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KARSSKIY, Vladimir Yevgen'yevich; DOROSHCHENKO, Pavel Petrovich;  
SYCHEV, M., red.; KUZNETSOVA, V., tekhn. red.

[Cupola furnaces with water cooling] Vagranki s vodianym okh-  
lazhdeniem. Lugansk, Luganskoe oblastnoe izd-vo, 1959. 12 p.  
(MIRA 16:1)

(Cupola furnaces)

SYCHEV, M. [deceased]

Rent for nonresidential buildings. Zhil.-kom.khoz. 7 no.12:27-28  
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(Rent)

SYCH, Marek, WINID, Boguchwal; GATARSKI, Julian; TRETER, Aleksander

Use of electric shock therapy in anesthesia with the application  
of controlled muscle relaxation. Neur. &c. polska 10 no.1:129-  
140 Ja-F '60.

1. z I Kliniki Chirurgicznej A.M. w Krakowie, Kierownik:  
prof. dr J. Bogusz. i z Kliniki Psychiatrycznej A.M. w Krakowie,  
Kierownik: prof. dr. E. Brzezicki.  
(SHOCK THERAPY ELECTRIC)  
(MUSCLE RELAXANTS ther.)  
(ANESTHESIA GENERAL)

KONDRATOV, M.G.; SYCHEV, M., red.; ALEKSEYEV, N., tekhn. red.

[Studies in forensic medical roentgenology] Ocherki su-  
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SYCHEV, M. M.		PROCESS AND PROPERTIES INDEX	
C		7-3-48	
<p>Determination of the specific surface of cements by the Carman method. V. F. ZHURAVLEV AND M. M. SYCHEV. <i>Zhur. Priklad. Khim.</i>, 20 [3] 171-78 (1947). - The Carman method for determining the specific surface of cements as modified by Lea and Nurse to force air through the layer of cement by means of exhaust was further modified to accomplish the same purpose by means of air pressure. Lea and Nurse used kerosene in the manometers with differences in levels of 10 to 40 cm., an air stream of 2 to 4 liters/hr., and an apparatus constant <math>C = 3.57 \times 10^{-4}</math>. The authors used alcohol in the manometers with differences in levels of 20 to 35 cm. and an apparatus constant <math>C = 8</math> to <math>10 \times 10^{-4}</math>. Specific surface was determined by the Carman method and also by calculations, using a powder whose granulometric composition was established by the Robinson method which was modified to use alcohol instead of water. The correction coefficient of the apparatus, <math>K = S_{calc}/S_{exp}</math>, where <math>S_{calc}</math> and <math>S_{exp}</math> are the calculated and experimentally obtained specific surfaces, was found to be 0.387. The proposed method is sufficiently simple to be adopted in research or control work. B.Z.K.</p>			
ASH-SLA METALLURGICAL LITERATURE CLASSIFICATION			
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SYCHEV, M. M.										PROCESSES AND PROPERTIES INDEX									
C										<p>Raw materials for making mineral wool. V. F. ZHURAVLEV AND M. M. SYCHEV. <i>J. Applied Chem. (U.S.S.R.)</i>, 21 (3) 195-203 (1948).—The following method was developed for testing the suitability of raw material for making mineral wool: (a) determination of the chemical composition of the raw material and of the fluxes, (b) proportioning of the charge and fluxes to give a melting point of not over 1200°C to 1250°C and a ratio of <math>(\text{SiO}_2 + \text{Al}_2\text{O}_3)/\text{CaO} &gt; 1</math>, (c) determination of the fluidity of the melt, (d) production of samples of mineral wool, (e) study of the properties of the wool and, if necessary, modification of the melt with fluxes until wool of the desired characteristics is obtained, (f) determination of the possibility of using the raw material, and (g) selection of the proper charge for large-scale production. The ratio of <math>\text{Al}_2\text{O}_3/\text{SiO}_2</math> should be considered as an important factor in affecting the viscosity of the melt for a given content of CaO. Experiments were conducted with six charges having about the same content of <math>\text{Al}_2\text{O}_3</math> and <math>\text{Fe}_2\text{O}_3</math> but varying contents of CaO and MgO. Best results were obtained with a charge containing <math>\text{SiO}_2</math> 41.80, <math>\text{Al}_2\text{O}_3</math> 8.80, <math>\text{Fe}_2\text{O}_3</math> 2.82, CaO 37.40, and MgO 7.84%, to which 0.58% sodium sulfate was subsequently added (to give 1.90% <math>\text{Na}_2\text{O}</math> in the melt). Characteristics of wool obtained from this charge were as follows: minimum thickness of fibers 1.25 <math>\mu</math>, maximum thickness 37 <math>\mu</math>, length of fibers 1 to 10 cm., bulk weight under a load of 0.1 kg./cm.<sup>3</sup> 240 kg./m.<sup>3</sup>, heat conductivity 0.07 cal./m. hr. °C, and hygroscopicity 0.42% in moist storage and 0.31% in air storage. B.Z.K.</p>									
ASH-SLA METALLURGICAL LITERATURE CLASSIFICATION										E-2 INDEX									
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SYCHEV, M. M.

USSR/Chemistry - Mineral Wool, Manufacture of  
Chemistry - Mineral Wools, Raw Material, Testing of

Mar 1948

"Research on Raw Materials for the Production of Mineral Wool,"  
V. F. Zhuravlev, M. M. Sychev, Leningrad Tech Inst, 8 pp

"Zhur Prik Khim" Vol XXI, No 3

Describe laboratory method to determine which of several sample of raw materials is most suitable for the manufacture of mineral wool. Tabulated results, showing characteristics of the samples. Submitted 8 Jun 1947.

PA 70T23

CA

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Hardness of minerals in cement clinker. V. P. Zhuravlev and M. M. Sychev. *Tsiment* 17, No. 4, 9-10(1961).-- The hardness was tested by compressing powder mineral under 250 kg./sq. cm. pressure into 0.5 X 0.5 X 0.5-cm. cubes, firing the cubes at appropriate temps. and detg. the hardness by penetration of a 200-g. load.  $C_2S$ ,  $C_3S$ ,  $C_4A$ , and  $C_4AF$  were tested in this way. Of these, the hardest were  $C_4AF$  and  $C_3S$ , and the least hard was  $C_2S$ . The brittleness estd. by observing the crumbling at the edges of the impression was highest for  $C_3S$  and practically nil for  $C_4AF$ .  
M. Hoseh